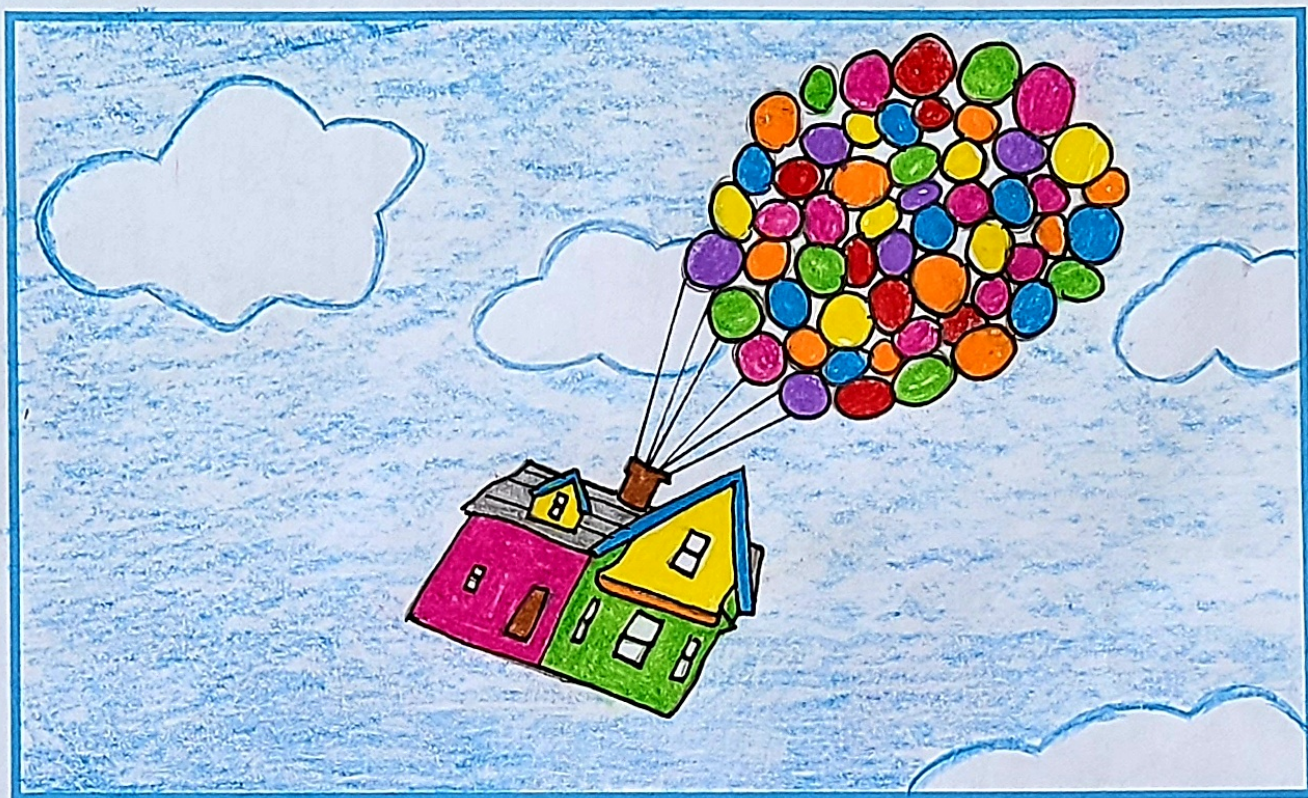


FIRST NAME, STATE: MAHI, TEXAS

THE SCIENCE BEHIND THE SCENE

Movies are fun to watch and you can also learn a lot from them! Pick one scene from a movie or show and explain why it is fact or why it is not.

1. Use the box below to draw out the scene.



2. Explain what is happening in the scene you drew.

The scene I drew is from the 2009 Pixar animated movie "UP". In this scene, the 78-year-old Carl Fredrickson's house is flying in the air with the help of thousands of helium balloons that are tied to the house through the chimney. He was trying to fulfill the promise that he made to his wife Ellie to escape to Paradise Falls in South America and live by the gigantic waterfall.

3. Is this fact or fiction? Explain your answer.

Although the scene from the movie looks like fiction, it is a fact. A house can be lifted with the help of helium-filled balloons.

A helium-filled balloon floats because helium is lighter than the air around it. Helium has a lifting force of around one gram per liter. A balloon that holds 10 liters of helium should therefore lift an object weighing 10 grams. That is why helium is a useful gas for lifting things into the air.

Inspired by the movie "UP" National Geographic team of scientists, engineers, and balloon pilots tried it. In 2011 in an episode "A House In Flight" in their TV series "How Hard Can It Be?", the team built a house to turn that magical scene of the flying house into reality. They used 300 helium-filled weather balloons that were 8 feet high when filled with helium. The house was a 16-foot-wide x 18-foot-tall house weighing about 2,000 pounds, carrying people inside, reached 10,000 feet in the air, and flew for more than an hour over the California Desert. They ended up creating a new world record for the largest balloon cluster flight ever attempted.

"ADVENTURE IS OUT THERE!" is a famous quote from this movie. Someday I would love to go on an epic adventure similar to this one exploring, trying new things, meeting new friends, and making lots of awesome memories on the way.